Vermont

Science and Engineering Profile													
Characteristic	State	U.S.	Rank	Characteristic	State	U.S.	Rank						
Doctoral scientists, 1999 ¹	1,720	518,670	47	otal R&D performance, 1998 (millions)		\$214,668	46						
Doctoral engineers, 1999 ¹	300	107,100	43	Industry R&D, 1998 (millions)	ns) \$112 \$163,480		41						
S&E doctorates awarded, 1999 ¹	34	25,953	49	Academic R&D, 1998 (millions)	\$58	\$25,342	48						
of which, in life sciences	50%	25%		of which, in life sciences	88%	57%							
in psychology	26%	14%		in other sciences	5%	2%							
in engineering	18%	21%		in engineering	2%	16%							
S&E postdoctorates, 1998 ¹				Public higher education current-fund									
in doctorate-granting institutions	73	39,494	43	expenditures, 1997 (millions)	\$348	\$125,236	48						
S&E graduate students, 1998 ¹				Number of SBIR awards, 1990-98	103	35,413	31						
in doctorate-granting institutions	613	422,834	51	Patents issued to state residents, 1999	340	83,901	36						
Population, 1999 (thousands)	594	276,580	50	Gross state product, 1998 (billions)	\$16	\$8,800	52						
Civilian labor force, 1999 (thousands)	336	140,536	49	of which, agriculture	2%	1%							
				manufacturing, mining, construction	23%	22%							
Personal income per capita, 1999	\$25,889	\$28,542	33	transportation, communication, utilities	8%	9%							
				wholesale and retail trade	15%	16%							
Federal spending				finance, insurance, real estate	18%	19%							
Total expenditures, 1999 (millions)	\$3,114	\$1,508,933	51	services	22%	21%							
R&D obligations, 1998 (millions)	\$58	\$70,445	48	government	12%	12%							

NOTE: Rankings and totals are based on data for the 50 States, District of Columbia, and Puerto Rico. Reliability of the estimates of industry R&D and of doctoral scientists and engineers varies by State, because the sample allocation was not based on geography. The rankings do not take into account the margin of error of estimates from sample surveys.

¹Data on graduate students, doctoral scientists and engineers, and postdoctorates include all graduate degree (except M.D.) candidates and recipients in S&E fields, including health fields. Data on S&E doctorates awarded do not include health fields.

Federal Obligations for Research and Development by Agency and Performer: Fiscal Year 1998												
	Performer											
	Total	Federal Intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank, total				
Agency	[In thousands of dollars]											
Total, all agencies	57,596	4,171	0	12,827	37,865	1,483	1,250	48				
Department of Agriculture	5,418	1,679	0	0	3,739	0	0	47				
Department of Commerce	776	126	0	0	40	610	0	43				
Department of Defense	13,640	1,115	0	11,133	1,392	0	0	42				
Department of Energy	584	0	0	141	370	73	0	48				
Dept. of Health & Human Services	29,291	5	0	496	28,020	620	150	41				
Department of the Interior	1,378	1,246	0	8	84	0	40	50				
Department of Transportation	497	0	0	0	0	0	497	51				
Environmental Protection Agency	743	0	0	0	0	180	563	42				
National Aeronautics and Space Admin	699	0	0	556	143	0	0	52				
National Science Foundation	4,570	0	0	493	4,077	0	0	49				
State rank, total	48	51	na	44	42	46	45	na				

NOTE: Federal R&D obligations are as reported by funding agencies. Ranks and totals are based on data for the 50 States, District of Columbia, and Puerto Rico.

KEY: FFRDC = federally funded research and development center; SBIR = small business innovation research; na = not applicable.

SOURCES: Prepared by the National Science Foundation/Division of Science Resources Studies. Data compiled from numerous sources -- see the section, "Data Sources for Science and Engineering (S&E) State Profiles".